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10/765,642	01/27/2004	Leonid Yabloko	4631-2	1158
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EXAMINER				
LE, THU NGUYET T				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/765,642

Applicant(s)

YABLOKO, LEONID

Examiner

THU-NGUYET LE

Art Unit

2162

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☐ Claim(s) _____ is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This office action has been issued in response to amendment file 10/03/08. Claims 1, 3-5, 7, 9-11, 13, 15-17 have been amended. Claims 2, 6, 8, 12, 14, 18 have been canceled. Claims 1, 3-5, 7, 9-11, 13, 15-17 are pending in this Office Action. Accordingly, this action has been made FINAL.

Specification

2. The disclosure is objected to because of the following informalities:

The disclosure encloses "the present invention can be included in an article of manufacture (e.g., one or more computer program products) having, for instance, computer useable media" in page 17 lines 26-27. The "computer **useable** media" should be changed to "computer **usable** media".

Claim 7 recites "computer usable media", which is not clearly defined in the disclosure. The examiner seeks for any positive statement in the disclosure that the "computer usable media" includes only hardware devices such as RAM, ROM, CD-ROM, magnetic disks. Clearly defining the "computer usable media" is an important factor to ensure the "computer usable media" of claim 7 (and its dependent claim 9-11) in statutory subject matter. Appropriate correction is required.

Pending applicants' response to the objection supra, examiner will interpret a "computer usable media" to include only hardware devices such as RAM, ROM, CD-ROM, magnetic disks.

Claim Objections

3. Claims 1, 7, 13 are objected to because of the following informalities:

Claims 1, 7, 13 recite "Tuple Spaces" in limitation (c). If "Tuple Spaces" is a trademark name, the claim does not comply with the requirements of 35 USC second paragraph. If "Tuple Spaces" is not the trademark name, the words should not be capital.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 3-5, 7, 9-11, 13, 15-17 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The subject matters of recited limitations below are not properly described in the specification.

In claims 1, 7, 13:

"(a) registering entities as provider of objects" in line 4.

"(f) representing the conditions, based on semantic terms" in line 14.

In claims 5, 11, 17:

(g) generating semantic categories by aggregating any of the semantic terms in any order.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 3-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites "(f) representing the conditions, based on semantic terms, under which the entity can produce one or more of the objects, by using keys, said keys defined by the entities". The recited limitation is separated by different phrases with commas. Thus, the recited limitation can be read in many different ways, e.g. representing the conditions ... by using keys, or the entity can produce one or more of the objects by using keys. Appropriate correction is required.

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1, 3-5, 7, 9-11 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter

Claims 1, 3-5 do not qualify as a patent eligible process under 35 U.S.C. 101. The process must (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials) to a different

state or thing. An example of a method claim that would not qualify as a statutory process would be a claim that recited purely metal steps. Thus, to qualify as a 101 statutory process, the claim should positively recite the other statutory class (the thing or product) to which it is tied, or positively recite the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

Claim 1 is amended to include "associating each of the objects with at least one semantic term, said associating done by the entities". The step/process "associating each of the objects with at least one semantic term, said associating done by the entities" is not performed by a computer system. Instead, the step/process is performed by a human because entity is defined in the disclosure as a buyer, a seller, or a banking entity (page 3 lines 7-8). Thus, claims 1, 3-3 are directed to non-statutory subject matter.

Claims 7, 9-11 recite the limitation of an apparatus. However, the claims lack necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101. As such, they fail to fall within a statutory category. They are, at best, functional descriptive material per se.

The claim recites "means for storing and retrieving...", "means for represent ...", "means for connecting...". However, neither "means for storing and retrieving...", "means for represent ...", nor "means for connecting..." is defined in the disclosure. Thus, claims 7, 9-11 are directed to non-statutory subject matter.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 3-5, 7, 9-11, 13, 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by as being anticipated by McGovern et al. (Java Web Services Architecture, published by Morgan Kaufmann -July 2003).

With respect to claim 1, McGovern discloses a method of allowing entities to cooperate for implementing one or more processes, the method being part of a computer system, comprising:

(a) registering entities as providers of objects (software company/organizations register them and the services they provide into UDDI, 5th and 6th paragraph, page 179, fig.6.3 page 182);

(b) associating each of the objects with at least one semantic term, said associating done by the entities (<name> Flute Bank ATM Pin Service</name>, 5th paragraph, page 186, or fig.6.5 page 183 service provider enters service name to the service detail interface);

(c) allocating a tuple to each of the at least one semantic terms, the tuple containing information provided by the object corresponding to the meaning of the at least one semantic term, allowing the tuple to be found in at least one Tuple Spaces

(business service is an entry in UDDI, business service entry holds descriptive information about the service, 3rd page 186);

(d) storing and retrieving information in the form of tuples (a service entry in UDDI, and UDDI registries is used to find the services, 1st paragraph page 177, 1st paragraph page 180, 3rd paragraph page 186);

(e) using the tuples to represent objects involved in one or more processes (fig.8.6 to register business service as a business service entry in UDDI registry, the tModel and bindingTemplate should be defined for completion of registration, fig.6.8 page 186) wherein each object is registered by an entity (Organizations register the services they provide, 6th paragraph page 179, and fig.6.5 page 183); and

(f) representing the conditions, based on semantic terms, under which the entity can produce one or more of the objects (2nd paragraph page 193), by using keys, said keys defined by the entities (business entity holds a unique identifier or businessKey, 5th paragraph page 178, 4th paragraph page 184,).

Claim 3 is rejected for the reasons set forth hereinabove for claim 1 and furthermore McGovern teaches the method further comprising:

(g) indicating one or more of any of the semantic terms in any order to represent a goal of the one or more processes (page 177, fig.6.8 page 186).

Claim 4 is rejected for the reasons set forth hereinabove for claim 1 and furthermore McGovern teaches the method further comprising:

(g) generating streams representing chains of events composed of sequential events which terminate at the tuples corresponding to each semantic term (servicekey

corresponding to each of services that business entity provide in UDDI, fig.6.8 page 186, fig.6.9, 6.10, 6.11page 187-188).

Claim 5 is rejected for the reasons set forth hereinabove for claim 1 and furthermore McGovern teaches the method further comprising:

(g) generating semantic categories by aggregating any of the semantic terms in any order (category bag allows for service to be classified, e.g "Flute Bank ATM Pin Service" is in category "Flute Bank ATM Service" page 186-187, page 192).

Claims 7, 9-11, 13, 15-17 are rejected on grounds corresponding to the reasons given above for claims 1, 3-5 because claims 7, 9-11, 13, 15-17 claim substantially equivalent limitations as claims 1, 3-5. Claims 1, 3-5 claim limitations of the method. Claims 7, 9-11 claim limitations of an apparatus. Claims 13, 15-17 claim limitations of an article of manufacture.

Response to Argument

Claim 13 have been amended to overcome the specification objection. Therefore, the specification objection of computer readable medium has been removed. Upon the amendment of claim 13, a new specification objection is enclosed in this office action (see section ***Specification*** above).

Applicants' argument that claims 1, 3-5 and 7, 9-11 are directed to statutory subject matter by because the claims are amended to include "being part of a computer system". The examiner respectfully disagrees. With respect to method claims 1, 3-5, adding "the method being part of a computer system" in the claim preamble does not make the claim become statutory. However, the steps in the body of method claim such

as: "registering entities...", "associating each of the objects" could be perform by human. Thus, claims 1, 3-5 are directed to non-statutory subject matter. With respect to apparatus claims 7, 9-11, adding "the apparatus **being part of a computer system**" does not make the claim become statutory because the computer system may include hardware components and/or software components. Thus, the apparatus can be the software part of the computer system. Thus, claims 7, 9-11 are directed to non-statutory subject matter.

Applicants' arguments with respect to claims 1, 3-5, 7, 9-11, 13, 15-17 have been considered, and are moot in view of the new ground(s) of rejection.

Accordingly, examiner strongly believes that a prima facie case has been clearly establish with respect to the prior art rejection of the instant claims, given their broadest reasonable interpretation.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THU-NGUYET LE whose telephone number is (571)270-1093. The examiner can normally be reached on 6:00-2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on 571-272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

December 19, 2008
/Thu-Nguyet Le/
Examiner, Art Unit 2162

/John Breene/
Supervisory Patent Examiner, Art Unit 2162